



STEALTHWAVE™ T2000

MIMO • Hypersonic Mobility • Frequency Hopping



MANET-MIMO Tactical Radios

2x 4W Transmit Power, Mesh Networking

True Random FHSS, AES-256 Encryption

Lightweight, Robust, Waterproof Transceivers

L-, S-, or Dual-band Configurations

Superior Performance

- Two 4W RF MIMO transmitters (8W effective).
- Up to 50 Mbps of network capacity.
- L-, S-, or dual-band configurations.
- Configurable RF within the selected broadband.
- Hypersonic Mobility up to Mach 5 (>6000 km/h).
- Lighter weight, Hand-held dimensions.
- ITAR Free Equipment.

Waveforms

- 2x2 MIMO Spatial Diversity.
- COFDM with selectable channel bandwidth.
- True Random FHSS with up to 512 frequencies.

Mesh Networking

- Robust Scalable MANET, up to 200+ nodes.
- Mesh, Star, and Mixed network topologies.
- Internally synchronised, GPS not needed.
- Dynamic Packet Routing between nodes beyond LoS.
- IP Filtering, Wireless Bridge, IP Multicast, Data Relay.
- Quality of Service based on DSCP.
- Silent Mode (RX Only).

Transmission Security

- Frequency Hopping Spread Spectrum (FHSS).
- AES-256 Encryption.
- Zeroization of TRANSEC parameters.

Avionics-grade Qualification

- Qualified for airborne environmental conditions.
- Extremely rugged IP67-rated design.
- Black hard anodized aluminium enclosure.
- Built-in self-tests (BIST).
- Over-temperature monitoring and protection.
- Robust power supply with EMI filtering, overcurrent, overvoltage, and reverse voltage protections.

Data Interfaces

- A single unit for Commanding & Control (C2), telemetry, audio, and video streaming.
- Simultaneous connection of multiple devices via Ethernet and two serial data interfaces.

Configuration and Diagnostics

- Link Commander: cutting-edge application for data link and mission control.
- Open protocol for local and remote configuration.
- Network and signal status monitoring.
- Real-time constellation.
- Multiple video players and Geo-positioning map.
- Spectrum Analyzer, Scanning Mode.

Specifications

Signal		
Frequency Range		1150-2600 MHz
Waveform		2x2 MIMO - COFDM
Modulations		QPSK, 16QAM
Channel Bandwidths	L-band	5, 10, 20, 30 MHz
	S-band	10, 20, 30 MHz
Data Rate		2 to 50 Mbps
Max. RF Output Power		2x 4W
Multiple Access		TDMA
Networking		Scalable Mesh, MANET
Transmission Security ^{-SE}		
Frequency Hopping ^{Option}		Up to 50 hops/s
Data Encryption ^{Option}		AES-256
Interfaces		
RF Connectors		2x TNC(f) 50Ω
Ethernet ^{Data & Control} <i>Mighty Mouse Series 800</i>		10/100/1000BASE-T
Circular Connector <i>2M Series 801</i>	Power Supply	+12 to +32 VDC
	Serial ^{Data}	1x RS232 and 1x RS422
Status Indicator		Tri-colour LED
Current Consumption ^{typ.} @28VDC, Max. RF Output	Peak	2.6A ^{73W}
	Average	1.6A ^{45W}
Mechanical		
Dimensions ^{without connectors}		106.0 x 72.0 x 42.5 mm
Weight		0.45 kg
Material		Aluminium 6082
Finishing		Black Hard Anodized
Environmental & Operational Conditions		
Operating Case Temperature		-40°C...+75°C
Storage Temperature		-55°C...+85°C
Waterproofness		IP67
Temperature, Humidity, Vibration, Shock, ESD		MIL-STD-810 RTCA DO-160
EMC		MIL-STD-461
Electrical Power Supply		MIL-STD-704F
Environmental Protection		RoHS, REACH
Export Classification	Standard ^{-ST}	EAR99 No License Required
	Security ^{-SE}	5A001.b.3, 5A002.a.2

Ordering Information

Part Numbering		T2000 -	CO	-	LO	-	ST
Waveform							
CO	OFDM						
RF Band, MHz							
L0	1150-1550						
S0	2000-2600						
S3	2400-2600						
LS	L0+S0 (Dual-band)						
Transmission Security							
ST	Standard ^{No License}						
SE	AES-256 + FHSS						